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EXAMINER

HARDEE, JOHN R

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/783,729  
Filing Date: February 20, 2004  
Appellant(s): CHAN ET AL.

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Brenda D. Wentz  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 23, 2009 appealing from the Office action mailed October 17, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. The appellants have not presented the rejections over Froehlich et al. '848 in view of Froehlich et al. '594; Froehlich et al.'848 in view of Chapman or Froehlich et al. '848 in view of Brown for review. These rejections, however, are maintained by the examiner for the reasons given below.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,481,126	TRINH et al.	11-1984
3,910,848	FROEHLICH et al.	10-1975
5,514,302	BROWN	5-1996
4,493,781	CHAPMAN et al.	1-1985
4,013,594	FROEHLICH et al.	3-1977

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-5, 8-12, 18, 31, 34, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al., US 4,481,126. Trinh discloses a substantially nonabrasive, liquid car cleaner composition which cleans car surfaces without an external source of water to wash or rinse. The product is a composition of up to 30% polymeric solids, up to 95% liquid carrier and a suspension aid. (abstract) Other optional ingredients such as waxes, fluorosurfactants, anticorrosion agents, antistatic agents, sunscreens, inorganic mild abrasives, pigments, perfumes, and preservatives can also be used for added benefits. (col. 2, lines 64-68) The liquid car cleaner composition of this invention comprises organic polymeric solids selected from the group consisting of: porous and/or nonporous powdered particles in the particle size range of from 1 micron to about 250 microns (col. 2, lines 37-42) A liquid carrier is required and can be used at a level of up to 95% by weight of the composition. Water is disclosed as a suitable liquid carrier, although mixtures of water and aliphatic hydrocarbon solvents are preferred. Both surfactants and thickeners are used as the

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suspending agent. The surfactants are also used as emulsifier and cleaning aid. (col. 2, lines 53-56 and 59-62) The suitable polymeric particulate materials can be synthetic or naturally-occurring polymeric materials include, but are not limited to, urea-formaldehyde resin, whereas the naturally-occurring polymeric materials are cellulosic materials. (col. 3, lines 34-44) The suspending agents useful in this invention are suitable surfactants and thickeners and mixtures thereof. These surfactant suspending agents have the properties of dispersing solid particles and liquid droplets (col. 5, lines 20-21). They are used to disperse the polymeric particles throughout the cleaner compositions. Substantially any surfactant materials which are compatible with the other components in the composition of this invention can be utilized. These include nonionic, anionic, cationic, amphoteric and zwitterionic surfactants. Specific cellulosic suspending agents include sodium carboxymethyl cellulose and hydroxyethyl cellulose (col. 5, lines 41-42). Regarding claim 11, the reference discloses at col. 7, line 13 that nonionic surfactants generally are useful in the compositions, and the structure in claim 11 is generic to most nonionic surfactants. Regarding claim 12, the recited sulfates are notoriously common anionic surfactants, the use of which would be immediately envisaged by the person of ordinary skill in the surfactant art in view of the disclosure of the utility of anionic surfactants. The composition of this invention can consist of up to 10% by weight of a suspending agent surfactant; preferably between 0.4% and 2%. Thickener suspending agents that can be utilized include, but are not limited to, sodium carboxymethyl cellulose, hydroxyethyl cellulose, and natural polysaccharides such as gums. They are used at effective levels of up to 10%. (col. 5, lines 18-45) Although the

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reference does not teach that the surfactant provides a surface tension in water of about 40 dynes per cm or less, the amounts of water and of surfactant disclosed in the reference overlap with those presently recited, so the recited surface tensions can be met while working within the teachings of the reference.

The reference fails to teach the specific surfactants of claims 11 and 12.

Although the reference fails to teach the specific surfactants of claim 11 and 12, there would be a reasonable expectation of success to modify the prior art to arrive at the instantly claimed invention because the prior art does suggest that any surfactant that is compatible with the system may be used. Regarding claim 34, the reference teaches at col. 4, lines 60+ that hydrocarbon solvents may be added. At col. 5, line 43, the reference teaches that polyethylene oxide may be added. Polyethylene oxide is a polyoxyalkylene material.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instantly claimed composition in view of the Trinh cleaning composition, which contains all the required components in the required amounts.

2. Claims 37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al., US 4,481,126 in view of Froehlich et al., US 3,910,848 or Brown, US 5,514,302. The Trinh reference is summarized above. It fails to teach that aerosol may be used with the liquid cleaner of the variety disclosed.

Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Froehlich, the

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secondary reference in analogous art teaches that a cleaning composition containing a polymer urea-formaldehyde polymer particles having a particle size of from 10 to 105 microns and an oil value of at least 90, a halogenated solvent boiling at from 45 degrees. to 120 degree C., a silica antisetling agent, a cationic antistatic agent, and an aerosol propellant selected from at least one of trichlorofluoromethane, dichlorodifluoromethane, 1,2-dichlorotetrafluoroethane, propane, isobutane and butane. (col. 1, lines 37-60).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

Brown, the secondary reference in analogous art teaches an improved aqueous fabric cleaning shampoo composition fabric solid cleaning polymer, surfactant in water Which may be in the form of a self-pressurized aerosol, with a conventional propellant such as dimethyl ether or one or more saturated alkanes containing from 2 to 6 carbon atoms such as propane, isopropane, n-butane, isobutane, isopentane or n-hexane is added through the valve. Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. See Brown, abstract, col. 10, lines 27-48.

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

The references are analogous because they are all directed to the cleaning of surfaces.

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3. Claims 1-5, 8-12, 18, 31, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froehlich et al., US 4,013,594 in view of Chapman et al., US 4,493,781. Froehlich et al. teach methods of cleaning carpets where compositions comprising about 30-90% particulate polymeric urea-formaldehyde having a particle size of 10-105 microns and a oil absorption value of no less than 90, 2-10% cationic antistatic agent and about 10-70% fluid, wherein the fluid is up to 100% water and the water contains sufficient surfactant to give a surface tension of less than 40 dynes per centimeter (column 1, lines 40-52; column 2, lines 40-50; column 3, lines 45-50; column 4, lines 1-4), and optionally dust suppressants (column 3, lines 45-58) and up to about 1% of optical brightening agents and mildewcides (column 7, lines 5-10) are applied to carpets. The examiner takes the position that choice of a specific mildewcide would be obvious in the absence of unexpected results. Froehlich et al. further teach methods of agitating the composition into the carpet, dried and removal by vacuum cleaner (column 5, lines 45-55). Froehlich et al. does not teach clays as a component of the compositions or liquid formulations. Chapman et al., in the analogous art of carpet cleaning, teach that it is conventional in powdered carpet cleaning compositions to add clays such as bentonite, kaolin and the like as brightening agents (column 5, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the compositions and methods of Froehlich et al. by incorporating the brightening clays taught by Chapman et al. because Chapman et al. teach these compounds as effective in brightening carpets in powdered carpet cleaning formulations. Furthermore, Froehlich et al. invite the inclusion of additives



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including brightening agents. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

4. Claims 37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froehlich et al., US 4,013,594 in view of Froehlich, US 3,910,848 or Brown, US 5,514,302. The '594 reference is summarized above. It further discloses that acrylates may be present (col. 5, line 42). It fails to teach that aerosol may be used with the liquid cleaner of the variety disclosed.

Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Froehlich '848, the secondary reference in analogous art teaches that a cleaning composition containing a polymer urea-formaldehyde polymer particles having a particle size of from 10 to 105 microns and an oil value of at least 90, a halogenated solvent boiling at from 45 degrees. to 120 degree C., a silica antisetling agent, a cationic antistatic agent, and an aerosol propellant selected from at least one of trichlorofluoromethane, dichlorodifluoromethane, 1,2-dichlorotetrafluoroethane, propane, isobutane and butane. (col. 1, lines 37-60).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

Brown, the secondary reference in analogous art teaches an improved aqueous fabric cleaning shampoo composition fabric solid cleaning polymer, surfactant in water Which may be in the form of a self-pressurized aerosol, with a conventional propellant

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such as dimethyl ether or one or more saturated alkanes containing from 2 to 6 carbon atoms such as propane, isopropane, n-butane, isobutane, isopentane or n-hexane is added through the valve. Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Brown, (abstract col. 10, lines 27-48).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

#### **(10) Response to Argument**

Appellants argue that the declaration of October 12, 2006 demonstrates that the addition of silicone, disclosed by Trinh as preferred, has a deleterious effect on the compositions when they are used for cleaning textiles. This is not persuasive because the declaration is now moot. It was filed when the claims were of "consisting essentially" scope, at which time the examiner stated that the presence of silicone would not affect the properties of the disclosed compositions in a deleterious fashion. The claims are now of "consisting" scope, so the only remaining issue, with regard to silicone, is whether or not it would be obvious to omit an ingredient disclosed as preferred. The teachings of a reference are not confined to what is exemplified or disclosed as preferred. A preferred ingredient is nonetheless optional, so it is obvious to omit it.

Appellants further argue that there is no motivation or suggestion in Trinh to use car cleaning compositions on a carpet. This is not persuasive because the claims are

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composition claims, not method claims. The compositions of Trinh, whether containing silicone or not, are useful for cleaning cars.

Appellant argues that there is not teaching whatsoever in the Trinh reference of a dispersion stabilizing agent selected from cellulosic polymers, etc. This is not persuasive because suspending agents and the specific role they play in dispersing solid particles and liquid droplets are disclosed at col. 5, lines 18+, and specific cellulosic suspending agents are disclosed at col. 5, lines 41 and 42.

Appellant's arguments regarding the combination of the Trinh reference with either of Froehlich '848 or Brown are directed to the perceived deficiencies of the Trinh reference and are not persuasive for the reasons given above.

Appellants do not argue the rejections over Froehlich et al. '848 in view of Froehlich et al. '594; Froehlich et al.'848 in view of Chapman or Froehlich et al. '848 in view of Brown. Because these grounds of rejection were not appealed, we request that the Board summarily affirm them.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/John R. Hardee/

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